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(54) LIQUID CRYSTAL DISPLAY DEVICE

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(57) Abstract:

PURPOSE: To enable use of a liquid crystal display device without replenishing and exchanging a power supply and to contrive miniaturization of the device by incorporating a solar battery into the liquid crystal display device and using said battery as an electric power source for displaying of liquid crystal display electrode.

CONSTITUTION: The solar battery 8 is superposedly fitted between a liquid crystal display plate 1 and a reflecting plate 3 in a photodetecting direction. The liquid crystal 7 which is of a positive type allows the transmission of light through the entire surface thereof including a display pattern 2 part while a switch 4 is not pushed. This full-surface light arrives at the solar battery 8 by which the solar battery 8 is charged. An electric circuit is connected and a voltage is impressed on the liquid crystal 7 to shield the light when the switch 4 is pushed. The light in the display pattern 2b part is then shut off and the light is allowed to pass the periphery 2c of the display pattern 2b. The solar battery 8 is thereby charged at all times and the need for a power source such as battery is eliminated.

